

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,822	01/27/2004	Paul E. Krajewski	GP-303999	9090
75	90 07/21/2006		EXAM	INER
CARY W. BROOKS			MAPLES, JOHN S	
General Motors				
Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300			1745	
Detroit, MI 48265-3000			DATE MAILED: 07/21/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	<i></i>			
Office Action Summany			KRAJEWSKI ET AL.				
		10/765,822					
	Office Action Summary	Examiner	Art Unit				
		John S. Maples	1745				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address	;			
WHIC - External after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communi D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 09 M	<u>ay 2006</u> .					
2a)⊠	This action is FINAL . 2b) This	action is non-final.					
3)[3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Dispositi	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1-18, 22-24</u> i s/ are pending in the application.						
=	4a) Of the above claim(s) <u>22-24</u> is/are withdrawn from consideration.						
5)□	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-18</u> ie/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	on Papers						
9)	The specification is objected to by the Examine	r.					
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the E	Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.1	l21(d).			
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-15	52.			
Priority u	under 35 U.S.C. § 119						
-	Acknowledgment is made of a claim for foreign ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).				
,	1. Certified copies of the priority documents	s have been received.					
	2. Certified copies of the priority documents	s have been received in Application	on No				
	3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage	е			
	application from the International Bureau						
* S	See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attack:	wa)						
Attachmen	t(s) e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) 🔲 Inforr Pape	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

Application/Control Number: 10/765,822

Art Unit: 1745

1. Applicant's election with traverse of Group I in the reply filed on May 9, 2006 is acknowledged. The traversal is on the grounds that Group I claims anode and cathode flow channels at outside edges while Group II claims the channels are at opposite sides of the bipolar plates and that the search would not put serious burden on the examiner. This is not found persuasive because as set forth above, the channels for the respective electrodes are located at different locations in the two groups. It is also noted that Group II includes cathode flow channels on the anode bipolar plate and anode flow channels on the cathode bipolar plate, which limitations are not part of Group I.

The requirement is still deemed proper and is therefore made FINAL.

It is noted that applicant filed a Petition from Requirement for Restriction on May 9, 2006. Applicant's attention is directed to 37 CFR 1.144 where it states that only restriction requirements that have been made final may be petitioned. Therefore, the above petition has not been considered.

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishida et al.-US 6,893,765. (Nishida)

Reference is made to Figures 1-3 of Nishida along with column 4, line 59 through column 5, line 57 and Example 1 and in particular column 9, lines 24-26 where the bipolar plate is taught made of aluminum. With reference to Figure 1, it is seen where the bipolar plates 21 and 31 sandwich the MEA 10. The middle portions of each bipolar plate includes flow channels as seen in the figures. The edges of the bipolar plates are recessed as seen in the right hand and left hand side of Figure 1 where the plates 17 hold the bipolar plates in position. The outside edges are depicted in Nishida as the top and bottom edges as seen in Figures 2 and 3.

Applicant's arguments have all been considered but are not deemed persuasive. Applicant argues that Nishida does not teach fabricating bipolar plates by an extrusion process. This may be true, however, applicant has not claimed a process of making bipolar plates by extrusion, applicant has merely used product-by-process claims comprising a bipolar plate(s). As long as a reference sets forth the claimed product in a product-by-process claim, the claim is anticipated-see In re Thorpe, 227 USPQ 964.

The reference to Nishida sets forth the claimed metal bipolar plate(s) and so the claims are met by the teachings to Nishida.

4. Claims 1-7 and 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Goebel-US 6,974,648. (Goebel) (New Rejection)

Reference is made to the Abstract of Goebel along with Figures 2-5 and column 1, lines 12-23; column 1, lines 55-67 and column 3, line 7 through column 5, line 57.

Application/Control Number: 10/765,822

Art Unit: 1745

These portions of Goebel set forth metal bipolar plates 60, 160 and 260 with an MEA inbetween-see Figures 3-5. The middle portions of each bipolar plate includes flow channels as seen in the figures. The edges of the bipolar plates are recessed as seen

in the right hand and left hand side of Figures 2-5.

5. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Thursday, 6:15-3:45, and every other Friday.

Application/Control Number: 10/765,822 Page 5

Art Unit: 1745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMAR

JSM/7-19-2006